STEP I

ASSESS AND TARGET POPULATION

Changes in caries patterns call for specific targeting strategies in community-based sealant programs so that the children with the greatest need receive sealants. Predicting caries risk both for individuals and populations continues to be under investigation. While dental caries has declined in the overall population, thousands of children in Washington State continue to experience this preventable disease. This decline in caries is not equally distributed and a small segment of children account for the majority of the disease. In public health programs limited resources must be used effectively. Targeting those children most vulnerable to experience decay is the first and most important step in planning a community based sealant program.

The first action is to define the geographic or administrative area to be served, then select a community site. Next identify which grade or grades will receive the service, select the appropriate children. Lastly, identify the specific teeth to be sealed.

When selecting a geographic area, the program must determine the appropriate method to target the population to whom this service is offered. Assessing the oral health status of an area s population will determine those at highest risk of experiencing dental decay on permanent molars. A valuable reference for assessing the oral health of a community entitled MCH Oral Health Needs Assessment is available for programs in Washington State. How to request this reference follows this step.

SELECT POPULATION

Factors that have been found to have a correlation with high dental disease rates are:

Income

Income criteria are often considered because children from low-income families tend to have higher disease experience and receive less dental treatment Income criteria are often considered because children from low-income families tend to have higher disease experience and receive less dental treatment. Use the Free and Reduced Meals Program as a proxy for income when targeting schools. This data is available from the Office of Superintendent

of Public Instruction yearly. Most programs in the state select schools according to some indicator of economic need and then make the program available to ALL students in targeted grades.

- q Geographic Location
- Geographic location can affect the number and proximity of dental professionals available to treat the targeted population.

q

q SELECT INDIVIDUALS

Once the site has been selected, individuals who will participate in the sealant program must be selected. Factors found to be important in selecting the appropriate individuals include:

q

q

- g Grade Level
- The permanent teeth most likely to experience occlusal caries are first and second molars. Most sealant programs, therefore, target these teeth. Studies show that second grade seems to be the most appropriate grade level to seal the most erupted, noncarious first molars. It is commonly recommended to select sixth graders for sealing second molars.

q

- g Resources
- Programs will vary in their ability to offer sealants depending upon the resources available. The location of the grades within the school district, the caries experience on the second molars in older grades, the tendency of the children in older grades not to participate, students school schedules can all influence the ability of the program to serve the maximum number of students. Some programs may be able to offer sealants to all students in both second and sixth grade while others may be able to offer sealants to students from only one grade level.

q

- Access To Care
- The ability of children to receive care at a private dental office or a non profit community based dental clinic can influence the selection of students. Some programs limit sealants to those children who do not have a dentist.

q

q SELECT TEETH

Once the individual has been selected to participate, the teeth to be sealed must be determined. Factors associated with the appropriate selection of teeth are:

q

- Tooth morphology may be used to determine tooth selection. While previous guidelines have suggested that a well-coalesced pit and fissure surface may not be at high risk for caries, in an individual with a history of caries, past or present, it may be better to apply sealants to protect against future decay. Successful sealant placement is directly related to the ability to maintain a dry field. Completely erupted teeth are most easily isolated. However, since treatment in the targeted population may be episodic, it may be best to seal any surface which can be adequately isolated. Assessment of caries activity level accomplished through the observation of present dental conditions in students will help in the selection of appropriate teeth to be sealed. For instance, molars with interproximal caries would not be a good candidate for sealants. Each tooth surface must be evaluated to determine the caries status. Pit and fissure surfaces can be classified as having no obvious decay, questionable decay, or obvious decay. In public health programs targeted to high risk individuals, it is recommended that ALL caries free surfaces be sealed. Questionable caries should also be sealed since there is a high probability those surfaces will have future caries. Look for the Journal of Public Health Dentistry article for more information FOLLOWING THIS STEP. Since the targeted population frequently does not access dental treatment, this approach is justified by the clinical research that has shown that caries inadvertently sealed will not progress if the sealant remains intact. If caries are obvious and enamel rods are broken, this surface should be referred for a restoration. An interim sealant could be placed to slow the caries process until the tooth is appropriately treated. If this decision is made, parents should be notified of the limitation of the sealant and urged to seek dental treatment for their child.
- A publication called BIBLIO focus on Dental Sealants FOLLOWS THIS STEP.

